

REMARKS

Claims 1-8 are pending in the application. These claims were rejected as follows:

Claims / Section	35 U.S.C. Sec.	References / Notes
1-3 & 5-8	§102(b) Anticipation	<ul style="list-style-type: none">• Cecil (U.S. Patent No. 4,991,193).
4	§103(a) Obviousness	<ul style="list-style-type: none">• Cecil (U.S. Patent No. 4,991,193); and• POLYDOROS.

5 Applicants have provided discussion below for distinguishing the present invention from the art cited against it. Applicants' use of reference characters below is for illustrative purposes only and is not intended to be limiting in nature unless explicitly indicated.

35 U.S.C. §102(b), CLAIMS 1-3 AND 5-8 ANTICIPATION BY CECIL

10 1. *Cecil fails to teach or suggest the element of a display of a period of time that the X-ray source requires in order to leave the thermal loading limit once the thermal loading limit has been reached, but rather discloses a shut-down timer.*

In the OA, on p. 2, the Examiner indicates that Cecil discloses all of the
15 elements of independent claim 1, and on p. 3, indicates that Cecil discloses all of the elements of claim 5. Specific language in both claims 1 and 5 relate to a particular display item, namely:

20 [an indication on a display] related to a period of time that an X-ray source requires in order to leave the thermal loading limit once a thermal loading limit has been reached...

In addressing these elements, the Examiner stated that Cecil discloses:

5 a display (62, 64 and/or 66) connected to the X-ray unit configured to display an indication related to a period of time that the X-ray source requires in order to leave the thermal loading limit once the thermal loading limit has been reached.

Applicants respectfully disagree with this characterization for the following reasons. Cecil actually discloses the display of a count-down timer indicating how long before the timer shuts down the scanner. Cecil, states, at 5/57-65:

10 For example, the message generator may print out an appropriate text on the display advising the operator... how long before the timer 60 will shut down the scanner. Optionally, a display 66 may be provided on the console for counting down the seconds until the
15 system powers down. When the shut-down timer 60 times out, it activates a power down routine 68 which causes a gantry power control 70 to shut down the x-ray tube and other gantry and console components in an orderly manner.

20 The count-down to shut-down counter of Cecil is substantially different from the display of a period of time that the X-ray source requires in order to leave the thermal loading limit of the present invention (recovery timer).

First, there is no relationship between the time period for shutting down and the time period for recovery. An X-ray source may, under certain high
25 operating conditions, heat up very rapidly, in which case the count-down timer of Cecil would be very short. However, given the configuration and structure of the X-ray source, the recovery may take some time. Conversely, a slightly high operating condition might invoke a relatively long count-down timer, whereas in this state the recovery time could be quite short.

This exemplary illustration seems to indicate an inverse relationship between these two variables, but even such an inverse relationship is not inherent, as these two values could vary independently of one another (for example, the presence of extensive heat sinks could substantially change the recovery time, but may have no bearing on the shut-down time). Furthermore, a system that might require a recovery time may never go into a shut-down mode. Finally, a shut-down timer according to Cecil prepares the operator for non-use of the device, whereas the recovery timer prepares the operator for the next use of the device.

10 In addition to these technical issues, the circuitry used to implement a shut-down timer would inherently be different from that used to implement a recovery timer.

Additionally, Cecil does not teach or suggest an integrated display with an indication related to a period of time that the X-ray source requires in order to leave the thermal loading limit and a control element that can initiate an unblocking in a common break-time key. Cecil discloses an override control 72 located, e.g., on a touch sensitive area of a separated display.

For these reasons, the Applicant asserts that the amended claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw the §102 rejection from the present application.

35 U.S.C. §103(a), CLAIM 4 OBVIOUSNESS OVER CECIL IN VIEW OF POLYDOROS

2. Applicants rely on the above arguments related to the independent claims and assert that the addition of POLYDOROS in combination with Cecil fails to teach or suggest the elements of the independent claims.

5 In the OA, on p. 4, the Examiner added the POLYDOROS reference as disclosing the element of dependant claim 4 related to displaying a value as a percentage.

Without addressing this argument on the merits, Applicants rely on the previously provided arguments and assert that POLYDOROS in combination with
10 Cecil fails to teach or suggest the elements of the independent claims.


For these reasons, the Applicant asserts that the amended claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw the §103(a) rejection from the present application.

CONCLUSION

Inasmuch as each of the objections have been overcome by the amendments, and all of the Examiner's suggestions and requirements have been satisfied, it is respectfully requested that the present application be reconsidered, the rejections be withdrawn and that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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